KENTUCKY

STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP) For FY 2017-2020

ADMINISTRATIVE MODIFICATION #2016.236

I. Proposed Action:

Modify the FY 2017-2020 STIP to include the Owensboro-Daviess County MPO's Amendment #2 to the FY 2014-2019 Transportation Improvement Program (TIP).

Location: Owensboro-Daviess County MPO Area

II. Scope of Activity:

See the attachments for more detail information.

III. Remarks:

This modification to the STIP will become part of the 2016 STIP end of Federal Fiscal Year 2018 "fiscal constraint" recalculations.

IV. Modification Approval:

Modification Recommended for Approval:

Kentucky Transportation Cabinet Date

Ronald B. Rigney, Director

Division of Program Management

Approval of Administrative Modification:

Federal Highway Administration Date

Recommended by Date

OWENSBORO-DAVIESS COUNTY METROPOLITAN PLANNING ORGANIZATION

FY 2014-2019 Transportation Improvement Program
Amendment #2
October 2018

OWENSBORO-DAVIESS COUNTY METROPOLITAN PLANNING ORGANIZATION Transportation Improvement Program FY 2014-2019 Amendment #2

ACTION:

The Owensboro-Daviess County Metropolitan Planning Organization (MPO) hereby amends the FY 2014-2019 Transportation Improvement Program (TIP) to add the following new project:

Project ID: 02-8300 and 02-8300.1 Project Type: Improvement of KY 54

Scope of Work: Improve KY 54 from west of the US 60 Bypass to Jack Hinton Road.

Length: 5.58 miles Phase: Right-of-way Type of Funding: STP Fiscal Years: 2019

Responsible agency: Kentucky Transportation Cabinet

Amount: \$15 million

Project Description: The project will widen Segment I (US 60 Bypass to Bold Forbes Way), the most heavily developed portion of KY 54, to three lanes in each direction and will include a raised, barrier median.

Segment 2 (Bold Forbes Way to KY1456) will be widened to five lanes, including a center turn lane. Additional right turn lanes will be constructed at strategic intersections

In Segment 3 (KY 1456 to Countryside Drive), the existing rural, two-lane roadway will be widened to a three-lane curb and gutter section with inclusion of a center left turn lane. Additional turn lanes will be provided at Country Heights Elementary School, where left and right turn lanes will be constructed. The rural portion of the KY 54 project, Segment 4 (Countryside Drive to Jack Hinton Road), will convert the existing two-lane roadway with minimal shoulders to include 8-foot paved shoulders. Dedicated left and right turn lanes will be provided at strategic intersections. This segment of the project includes in-place replacement of two existing bridges, one just east of Countryside Drive over Barnett Creek and the other just west of Jack Hinton Road, the end of the project, over Caney Creek. A shared-use path is proposed for the majority of Segment 1 and it will extend through segments 2 and 3, providing access to KY 1456 (Fairview Drive) and Country Heights Elementary School. The path will end at Countryside Drive.

Other Information: This project is currently shown in Informational Supplement section of the FY 2014-2019 TIP document as a state-funded project. This amendment allows the programming of federal funding for the right-of-way phase. This additional funding is being provided by the project sponsors (KYTC/FHWA) and maintains financial constraint of the TIP and MTP documents, and no additional financial constraint analysis by the MPO is needed.

Performance-based Planning Requirements: MAP-21 and the FAST Act emphasize incorporating performance management into transportation planning and programming processes. National performance goals have been established for seven key areas, and states are required to establish performance targets in support of these national goals. Projects in Kentucky's STIP address transportation needs in one or more of these key areas, which are:

- Safety
- Infrastructure Condition
- Congestion Reduction
- System Reliability
- Freight Movement and Economic vitality
- Environmental Sustainability
- Reduced Project Delivery Days

As of May 27, 2018, TIP Amendments must be developed in compliance with the transportation performance measure requirements for safety measures. Performance measure requirements related to pavement condition, bridge condition and system performance become effective in May 2019.

Safety Performance: In February 2018, the Owensboro MPO took action to adopt Safety Performance Targets established by the Kentucky Transportation Cabinet. These baseline targets established goals for reducing the number of fatalities, serious injuries and nonmotorized fatalities and serious accidents on all public roads in Kentucky.

All Targets represent a rolling five-year average. The Safety Targets established by KYTC and adopted by the MPO are:

- Fatalities 730
- Serious Injuries 2,800
- Fatality Rate (per 100 million Vehicle Miles Traveled) 1.5
- Serious Injury Rate (per 100 million Vehicle Miles Traveled) 5,76
- Nonmotorized Fatalities and Serious Injuries 293

All of these Targets represent a reduction in the baseline averages in calendar years 2017 and 2018 as compared to calendar years 2015 and 2016. This goal is shared with the SHSP and reiterates KYTC's commitment to the shared vision of Toward Zero Deaths,

Anticipated Effect of TIP Amendment Toward Achieving Safety Targets: The purposes of this project are to improve safety by reducing congestion and improve mobility along this corridor by reducing travel time delays.

An analysis of police reports from 2017 found that five intersections in the KY 54 project area were among the top 20 collision locations in the MPO area. The top overall location for collisions in 2017 was in Segment 1, at the intersection of the US 60 eastbound offramp and KY 54. It was the site of 46 collisions in 2017.

The other intersections in the top 20 also were in Segment 1:

- KY 54 and Highland Pointe Drive (24 collisions)
- KY 54 and Fairview Drive (21 collisions)
- Wimsatt Court (21 collisions)
- KY 54 and Villa Pointe (17 collisions)

All five intersections also have been among the top 20 collision locations for the preceding four years as well.

Crash data analyzed from March 1, 2013 to February 28, 2018, indicate 533 collisions in the project area resulting in two fatalities and 135 injuries. Of these collisions, 361 (92 injuries) occurred in Segment 1 from the US 60 Bypass to Bold Forbes Way. The manner of the collisions in this segment are consistent with heavily congested roadways. Similar results were found in Segments 2 and 3.

As traffic moves into Segment 4, congestion still is present, but appears to play a smaller role. Roadway departure incidents begin to be more prevalent and angle collisions are more severe due to increased speed.

	Total Collisions	Fatal Collisions	Number of Fatalities	Injury Collisions	Number of Injures
Segment 1 (US 60 Bypass to Bold Forbes Way)	361 (72 in wet conditions)	0	0	55	92
Segment 2 (Bold Forbes Way to KY 1456)	45 (6 in wet conditions)	0	0	8	8
Segment 3 (KY 1456 to Countryside Drive)	41 (10 in wet conditions)	0	0	7	12
Segment 4 (Countryside Drive to Jack Hinton Road)	86 (17 in wet conditions)	1	2	18	23
Totals	533		2	88	135

The addition of a third travel lane in each direction in Segment 1 is designed to reduce congestion, thereby reducing the frequency of rear-end collisions. The addition of a raised barrier median will help to reduce a high number of injury collisions by eliminating left turns at intersections without signals. The center turn lane and addition of a right turn lanes at strategic intersections in Segment 2 are designed to help reduce the number of rear-end collisions in the area.

Crash data suggest that congestion in Segment 3 of KY 54 is contributing to a high rate of rear-end collisions. The addition of a center turn lane and the inclusion of additional turn lanes at Country Heights Elementary School will help to alleviate that issue.

The inclusion of wider shoulders in Segment 4 is expected to help reduce the number of roadway departure crashes and the addition of turn lanes will mitigate the cause of rear-end collisions at those intersections.

The addition of the shared-use path provides safer access for pedestrians and bicyclists along KY 54, where no facilities for them currently exist and thereby support safety performance targets associated with the reduction in nonmotorized fatalities and injuries.

Amended 2014-2019 TIP tables reflecting this project are included on the following pages.

Approved

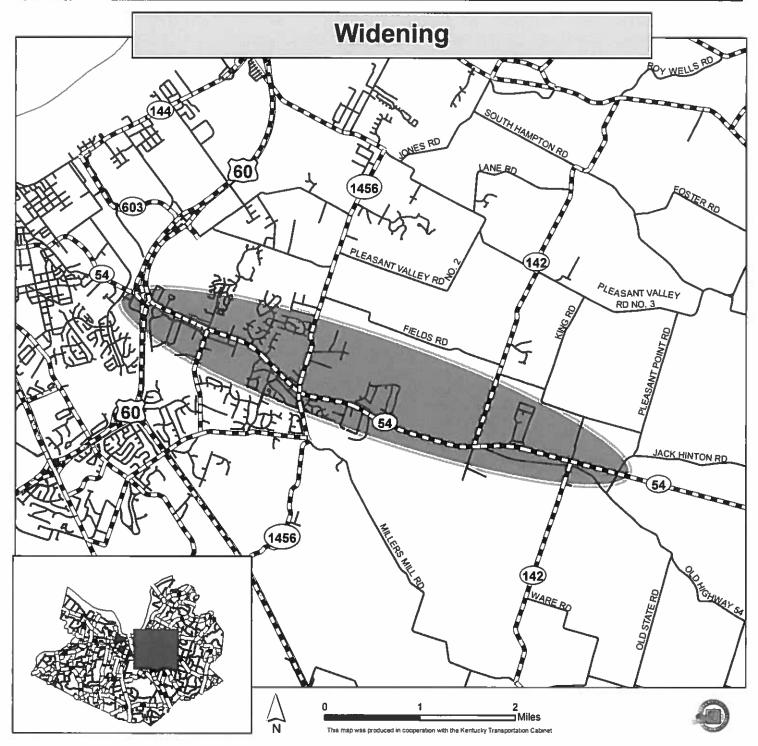
Thomas H. Watson, Mayor of Owensboro

MPO Policy Committee Chairman

/0/14/18

Attest

	Owensboro-Day	iess County MPO Transportation	n Improvement Program FY	2014 - 2019					
KYTC ID	02-8300.00 & 02-8300.01								
Route	KY 54								
Project Description		Widening KY 54 from US 60 Bypass to Jack Hinton Rd							
Fiscal Year		TOTAL FUNDING							
Phase		F	₹						
Responsible Party		KY	TC						
Funding Source		Sī	TP .						
Amount		\$15,00	00,000		\$15,000,000				



Owensboro-Daviess County MPO

FY 2014-2019 Transportation Improvement Program Federally Funded Projects

		reuerany	i unu	cuiloje	.003			
ROUTE	KYTC ID	DESCRIPTION	FUND TYPE	PHASE	YEAR	FEDERAL/STATE COST	TOTAL PHASE COST	
US 60	2-237	Reconstruction on US 60 between Oakford Loop Road (CR (1370) to address flooding problem in the vicinity of the Kimberly Clark plant	STP	с	2019	\$2,000,000	\$2,000,000	
	2-1075	Replace bridge on PR 1212 (Pather Creek Park Drive) over trib. Of Pather Creek; 0.4 miles east of KY 279	BRZ	R	2015	\$120,000		
PR 1212				U	2015	\$150,000	\$640,000	
		The state of the s		С	2016	\$370,000		
				D	2015	\$215,000		
		Replace bridge over Burnett Fork on CR		R	2016	\$75,000		
CR 1014	2-1093	1014 (Fields Road)	BRZ	υ	2016	\$75,000	\$715,000	
				С	2016	\$350,000		
WN 9007	2-2092.0/ 2-2092.1	Upgrade the Natcher Parkway to interstate standards in order to establish I		R	2018	\$200,000		
		165 spur route between Bowling Green and Owensboro	NH	C	2020	\$4,750,000	\$4,950,000	
	2-3022	Construct a multiuse trail beginning at the Owensboro Health Systems Campus on Daniels Lane, extending northeast toward Yellow Creek Park, located on KY 144		D	2014	\$41,812	\$342,508	
			TE	С	2014	\$300,696	45 12 ,555	
	2-3701	Owensboro Riverport Authority rail track expansion	TE	С	2018	\$1,210,454	\$1,210,454	
CR 1053	2-8813	Graves Lane Bridge Replacement 0.2 mile east of junction with KY 405 over Allgood Ditch	STP		2020	\$384,090		
CK 1055			STATE	С	2020	\$235,410	\$619,500	
			STP	D	2021	\$680,000	\$680,000	
KY 3143	2-8854	Improve KY 3143 from KY 3355 to KY 54	STP	R	2024	\$2,730,000	\$2,730,000	
			STP	U	2024	\$3,380,000	\$3,380,000	
			STP	D	2019	\$108,500	\$175,000	
CR 1068	2-10002	Address deficiencies of Rockport Ferry	STATE			\$66,500	4273,000	
		Road Bridge over Kelly Creek	STP	С	2020	\$401,450	\$647,500	
			STATE STP			\$246,050 \$108,500		
CR 1129	2-10003	Address deficiencies of old KY 54 D3 bridge over branch of north fork of Panther Creek	STATE	D	2019	\$66,500	\$175,000	
			STP STATE	С	2020	\$401,450	\$647,500	
						\$246,050		
	2-10004	Address deficiencies of Lyddane Bridge	STP STATE	D	2019	\$108,500	¢176 000	
CR 1257						\$66,500	\$175,000	
CH 123/		south bridge over Flat Rock Creek		c	2020	\$444,850	\$717,500	
			STATE			\$272,650	,	

KY 2262	2-10020	Address deficiencies with Glover Cary Bridge over Ohio River (Joint project with Indiana)	STP	D	2019	\$124,000	\$200,000	
			STATE		2019	\$76,000	\$200,000	
	2-10020		STP	c	2020	\$1,395,000	\$2,250,000	
		,	STATE	`	2020	\$855,000		
			STP	D		\$45,500	\$175,000	
			NH		2019	\$63,000		
US 231	2-10021	Address deficiencies with Glover Cary Bridge over Ohio River (Joint project with	STATE			\$66,500	1	
03 231	2-10021	Indiana)	STP	С		\$2,600,000		
		,	NH		2020	\$3,600,000	\$10,000,000	
			STATE			\$3,800,000		
	2-10023	Address deficiencies of KY 764 bridge over unnamed stream	STP	D	2019	\$43,400	\$70,000	
KY 764			STATE			\$26,600		
K1 704			STP	c	2020	\$217,000	\$350,000	
			STATE			\$133,000		
KY 2155	2-20019	Address pavement condition of PCC pavement	STP	D	2019 2019	\$30,000	\$150,000 \$1,500,000	
			NH			\$90,000		
			STATE			\$30,000		
K1 2133			STP	c		\$300,000		
			NH			\$900,000		
			STATE			\$300,000		
	2-20020	Address pavement condition of William Natcher Parkway (both directons) from MM 61.553 to MM 66.08	STP			\$847,600		
WN 9007			NH	c	2020	\$2,542,800	\$4,238,000	
			STATE			\$847,600		
	2-20021	Address pavement condition of William OD21 Natcher Parkway (both directons) from MM 66.08 to MM 72.26	STP NH	С	2020	\$1,153,600		
WN 9007						\$3,460,800	65 750 000	
			STATE		2020	\$1,153,600	\$5,768,000	
KY 54	2-8300.00 2-8300.01	Widen KY 54 between Owensboro and Whitesville from MP 2.470 to MP 8.003.	STP	R	2019	\$15,000,000	\$15,000,000	

Table I
Summary of Funding
Owensboro-Daviess County MFO
Transportation Improvement Program FY 2014 - 2019

				_	_	,		_	_	,_	_	_
	TOTAL	Revenue	\$13,002,250	\$15,988,806	\$675,000	\$1,355,000	\$3,404,040	\$18,250,000	\$0	\$56,645,000	\$1,200,000	\$110.520.096
		Est. Cost	\$13,002,250	\$15,988,806	\$675,000	\$1,355,000	53,404,040	\$18,250,000	20	\$56,645,000	\$1,200,000	\$14.226.442 \$14.226.442 \$18.903.575 \$18.903.575 \$110.520.096 \$110.520.096
		Revenue	52,830,500	\$1,073,075				\$15 000 000	100			\$18,903,575
	FY 2019	Est. Cost	\$2,830,500	\$1,073,075				\$15,000,000				\$18,903,575
	810	Revenue	\$2,710,750	\$915,692						\$10,600,000	\$1,200,000	\$14.226.442
	FY 2015 FY 2016 FY 2017 FY 2018	Est. Cost	\$2,710,750	\$915,692						\$10,600,000 \$10,600,000	\$1,200,000	\$14,226,442
		Revenue	\$2,598,500	\$1,872,088	\$675,000					\$29,890,000		\$10,365,810 \$10,365,810 \$35,035,588 \$35,035,588
		Est. Cost	\$2,598,500	\$1,872,088	\$675,000					000 068 675		\$35,035,588
		Revenue	\$2,490,250	\$930,560		\$870,000		\$2,000,000		\$4,075,000	450	\$10,365,810
		Est. Cost	\$2,490,250	2930,560		\$870,000		\$2,000,000		24,075,000	NO. 126 %	\$10,365,810
		Revenue	\$2,372,250	197,391		\$485,000	\$3,404,040	\$1,250,000		\$12,080,000	A.C.	\$30,788,681
		Est. Cost	\$2,372,250	165,791,118		\$485,000	23,404,040	\$1,250,000		\$12,080,000	100	\$30,788,681
	FY 2014	Revenue	0\$	0\$		0\$		80				0\$
		Est. Cost	20	80		0\$		80				0\$
	Funding Type		FTA - OTS	FTA - GRITS	BRX	BRZ	HPP	STP	SB2	SPP	H	TOTAL